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CONFIRMATION NO. 4026

Bib Data Sheet	

SERIAL NUMBE 09/847,525	FILING DATE 05/01/2001 RULE	CLASS 424	GROUP ART	UNIT	ATTORNEY DOCKET NO. NB-2016.00		
Ming Fai Chan, Encinitas, CA; Rosario S. Castillo, San Diego, CA; Qing Li, La Jolla, CA; Venkata Ramana Doppalapudi, San Diego, CA; Mark Stephen Hixon, San Diego, CA; Thomas J. Lobl, Foster City, CA; *** CONTINUING DATA **********************************							
IF REQUIRED, FO ** 08/15/2001 Foreign Priority claimed 35 USC 119 (a-d) conditi	REIGN FILING LICENSE	STATE OR	SHEETS DRAWING	TOTAL CLAIM			
met Verified and Acknowledged ADDRESS 022836	Allowance	CA	14	73	3		
TITLE Beta-lactam antibiotics							
RECEIVED N	iven in Paper redit DEPOSIT ACCOL	□ 1.1 □ 1.1	All Fees 1.16 Fees (Filing) 1.17 Fees (Processing Ext. of time)				
912 N	o for following	j :	□ 1.1	1.18 Fees (Issue) Other Credit			

FIGURE 3

4

$$(5) \frac{\text{4-nitrophenylchloroformate.}}{\text{2.6-lutidine, } (i\text{-Pr})_2\text{NEt, } 25\,^{\circ}\text{C}} \\ \text{OH} \\ \text{CI} \\ \text{CI} \\ \text{CI} \\ \text{2.6-lutidine, } (i\text{-Pr})_2\text{NEt, } 25\,^{\circ}\text{C}} \\ \text{S} \\ \text{H} \\ \text{H} \\ \text{S} \\ \text{CO}_2\text{CHPh}_2} \\ \text{(12)} \\ \text{CI} \\ \text{$$

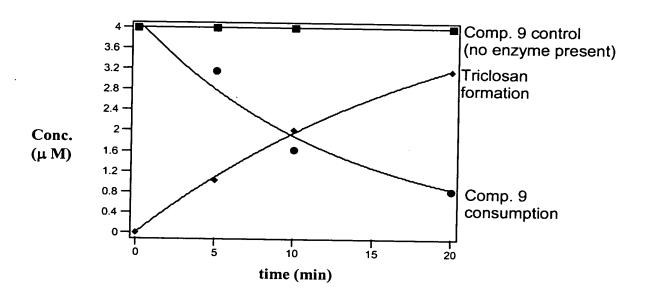
(14)

(29)

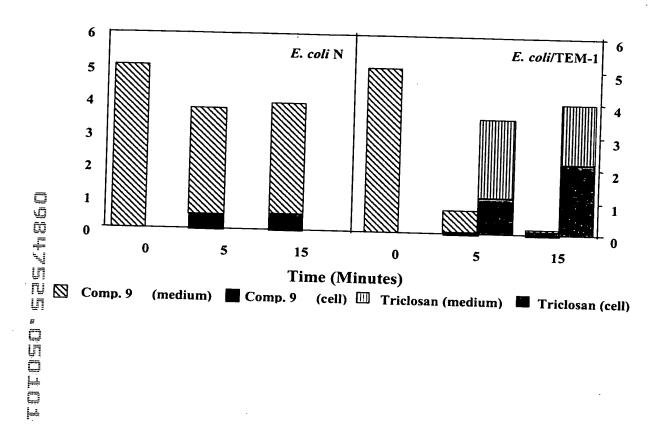
OH O
$$\downarrow$$
 CI \downarrow CI \downarrow

D		
R	R'	Compound
Ph-CH2-	Ph-CH2-	37
Ph-CH(NH2)-BOC	Ph-CH(NH2)-	38
N Trityl	NH ₂	39
но	но	40
HN—BOC	HO NH ₂	41
N—BOC HN N BOC H	H ₂ N NH	42
S N N N N N	S N N N N N N N N N N N N N N N N N N N	43
Trityl N OCH3	H₂N—NOCH3	44
CH3-	CH3-	45
HO-Ph-CH2-	HO-Ph-CH2-	46

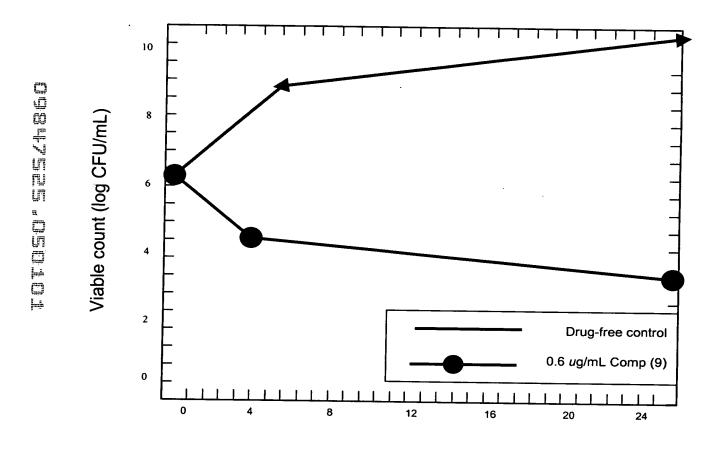
		CI
R	R'	Compound
Ph-CH2-	Ph-CH2-	37
Ph-CH(NH2)-BOC	Ph-CH(NH2)-	38
NH Trityl	NH ₂	39
но	но	40
HN—BOC	NH ₂	41
HN N H	H ₂ N N H	42
HN—N	HN N	43
Trityl N OCH ₃	H ₂ N—S N OCH ₃	44
HO-Ph-CH2-	CH3-	45
	HO-Ph-CH2-	46
N S NH S S S S S S S S S S S S S S S S S	N S NH S N S N S N S N S N S N S N S N S	47



TEM-1 β -lactamase (12.5 nM) catalyzed hydrolysis of Comp. 9 100 mM K-phosphate buffer pH 7.2 with 1 mM EDTA



Bactericidal activity of Comp (9) vs. S. aureus



Time (hour)